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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,293	02/15/2005	John Banks	6270P0222 US	7802

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EXAMINER

COZAD, JULIANNE M

ART UNIT PAPER NUMBER

3671

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/525,293

Applicant(s)

BANKS, JOHN

Examiner

Julianne M. Cozad

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 5-7, 16, 20, 21 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 8-15 and 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because of the following:
  - Figures 3 and 4 do not show the first link arm 25 being mounted with base plate 21 by a pivotal connection at 29, as disclosed in the specification (page 12, lines 4-5). Figures 6-16 accurately depict the disclosed relationship.
  - Electronics module 18 (page 15, lines 15,23) is not shown in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The disclosure is objected to because of the following informalities:
- Page 6, line 6 "One or more or each the first" should be changed to "One or more of each of the first".
  - Page 8, line 3 "damping black" should be changed to "damping block"
  - a. Page 16, line 9, "link arm 31" should say "link arm 32"

Appropriate correction is required.

2. Claims 8-15 and 17-19 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependant claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

***Claim Objections***

3. Claim 1 is objected to because of the following informalities: line 5 states "a first link pivotally connected the support member"; the word **to** should be inserted so it states "a first link pivotally connected **to** the support member. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3671

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Banks [US 5,988,290].

**With respect to claim 1**, Banks '290 discloses a cultivator for aerating a ground surface including:

- A support frame 24 moveable relative to the ground surface generally along a first direction, see Figure 1
- A tool support member 74 connected to said support frame by at least two links 78,87, a first link 78 pivotally connected to the tool support member 74 at one end and pivotally connected to a second link 87 at an opposite end, said second link 87 pivotally connected to said support frame 24 via rotation about stop means 92, said tool support member 74 operable along a second direction substantially perpendicular to the first direction (moves primarily vertically versus frame travel being horizontal)
- A driver 54 to selectively effect cyclic movement of the tool support member 74 in said second direction (54 causes tool support member 74 to move in said second vertical direction)
- A bias element (buffer 91,96) to provide resilient damping of the pivoting movement of said second link 87 in a first rotary direction

Art Unit: 3671

- A dampening element (buffer 90,95) to provide resilient damping of the pivoting movement of said second link 87 in a second rotary direction opposite said first rotary direction, to progressively arrest pivoting movement of the second link in the second rotary direction. As 87 rotates, the buffers are compressed and progressively engage with increasing force on second element 87.

**With respect to claim 2**, said driver 54 includes a mechanical arrangement which imparts reciprocating movement to one of the link arms (78 or 87), see Figures 3-6.

**With respect to claim 3**, said driver 54 includes a rotating flywheel 54 and a connecting rod (tool support member 74) mounted to move reciprocally in response to rotation of the flywheel 54, Figures 3-6.

**With respect to claim 4**, said dampening element 90,95 comprises a cam surface 95 formed on said second link 87 and a dampening block 90,93 arranged to progressively engage said cam surface 95 upon pivoting movement of said second link 87.

***Allowable Subject Matter***

6. Claims 5-7,16,20 and 21 allowed.

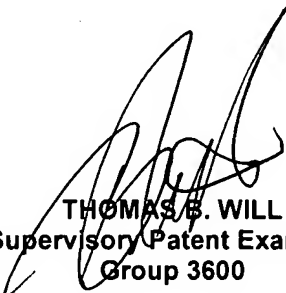
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julianne M. Cozad whose telephone number is 571-272-6946. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMC  
1/26/2006

  
THOMAS B. WILL  
Supervisory Patent Examiner  
Group 3600